UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,363	04/25/2001	Ahmad Ansari	7780/13 (T00341)	6562

83808   7590   06/08/2009
AT & T Legal Department - BHGL
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EXAMINER
RAMAN, USHA

ART UNIT	PAPER NUMBER
2424	

MAIL DATE	DELIVERY MODE
06/08/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/842,363	ANSARI ET AL.
	Examiner	Art Unit
	USHA RAMAN	2424

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *13 May 2009*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1,3,4,6-13,15-17 and 21-24* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1,3,4,6-13,15-17 and 21-24* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments filed May 13, 2009 have been fully considered but they are

not persuasive.

Applicant traverses the combination of Payton with Gemmell and Tillman

stating (see Remarks, page 6) that, "the cited portions of Gemmel does not teach

pre-fetching of a low quality video to a subscriber terminal" and further arguing (see

Remarks, page 7) that, "the cited portion of Payton does not teach downloading a

low quality portion of a program during off peak hours". Examiner respectfully

disagrees. The examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed

invention where there is some teaching, suggestion, or motivation to do so found

either in the references themselves or in the knowledge generally available to one of

ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir.

1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this

case, Gemmel discloses that a low quality version may be downloaded in its entirety

[0044], and Gemmel additionally recognizes the obvious advantages of having a

pre-fetched copy of a portion available on-hand [0051]. While Gemmel only

discloses using a pre-fetch on second and subsequent layers, one of ordinary skill in

the art would have at time of the invention, it found it advantageous to have at least

a base quality version of a program available at hand, so that playback can

commence immediately upon selection of the program, wherein after playing back

the low quality version the user can determine whether or not to request

enhancements. Analogously, Peyton presents a method of pre-fetching programs

during off-peak times, allowing the pre-fetched titles to be available "on hand" for

immediate playback request, as well as reducing bandwidth constraints on a system

by reducing the amount data that needs to be transmitted during peak time.

Advantages of the modified system would be particularly evident in a system

servicing a high number of users, wherein by pre-fetching the entirety of a base

quality of the video, the system reduces the bandwidth usage at peak time (such as

evenings, when users are most likely to request data) that would have otherwise

been needed to transmit the base quality of a plurality of video to users requesting

viewing at peak time. Rather the system need only transmit the incremental

differences upon demand by the user.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as
> set forth in section 102 of this title, if the differences between the subject matter sought to be
> patented and the prior art are such that the subject matter as a whole would have been obvious
> at the time the invention was made to a person having ordinary skill in the art to which said
> subject matter pertains. Patentability shall not be negatived by the manner in which the invention
> was made.

3. Claims 1, 3-4, 6-13, 15-17, and 21-24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Gemmell (US PG Pub. 2002/0116473) in view of Tillman et al. US

Pat. (6,496,980) Payton (US Pat. 5,790,935).

With regards to claims 1, and 21, Gemmell discloses a method of downloading a video content representing a program to a subscriber terminal comprising:

Decomposing video content into a plurality of video quality portions [0006]: a low quality video portion of the plurality video quality portions comprising a complete copy of the program at a video lower than at least one of the plurality of video quality portions [0006], [0015];

Downloading a complete copy of the low quality video portion to the subscriber terminal ([0044] "single client request results in data streams of the requested layer begin transmitted in their entirety from the server") over a network [0033] for storage locally at the subscriber terminal (208), [0042];

Receiving from the subscriber terminal a selection request for the program corresponding to the video content after downloading the complete copy of the low quality video portion ([0042] "during the user directed second play back...")

Downloading at least one of the plurality of video quality portions having a video quality higher than a low quality video portion to the subscriber terminal over the network in response to the selection request ([0042] "during a user-directed second playback, layer 2 is streamed, stored...").

Gemmell discloses the client computer is coupled over a network (such as LAN, WAN, etc.) to the server [0033], [0034]. Gemmell additionally discloses that the transmission of layers separately is particularly advantageous in bandwidth limitations based on network capacity/types [0004]. Gemmell is however silent on

downloading the plurality of quality portions via a digital subscriber line. Gemmel

further discloses a method of "pre-fetching" certain layers so that it can be available

"on-hand" in the client's memory for quick presentation (Gemmell: [0048], [0051]).

Gemmell only discloses pre-fetching within the context of second and subsequent

layers and silent on pre-fetching the first portion of the video during off peak hours.

In an analogous art, Tillman is evidence that digital subscriber lines were well

known in the art of time for network connection and further evidence for downloading

plurality of quality portions over a bandwidth constrained network such as the digital

subscriber line (see column 3 lines 58-64).

In a further related art, Payton discloses a method of predicting items a

subscriber might like based on user preferences and downloading such items to the

subscriber terminal during off peak hours (see abstract).

It would have been obvious to one of ordinary skill in the art to

advantageously incorporate the teachings of Payton by predicting what a user likes,

and downloading the low quality portion of the predicted items to the user's terminal

during off peak times so that the predicted items can be available "on hand" for

immediate playback, wherein the user can examine the video and determine if a

higher quality for the video is desired. Additionally, one skilled in the art could have

easily combined the methods of transmitting the various quality portions via a digital

subscriber line connection, as taught by Tillman with no change in their respective

functions, and the combination would have yielded predictable results to one of

ordinary skill in the art at the time of the invention.

With regards to claim 3, the system comprises video content (Gemmell: [0043]). Gemmell is silent on the compressing the video content, however Tillman is evidence that compressing the video content was well known in the art at the time of the invention (see column 5 lines 14-18). It would have been obvious to one of ordinary skill in the art to compress the video content so that storage space and transmission bandwidth for the video content can be reduced.

With regards to claims 4, and 13, the modified system further comprises the step of compressing the video content using a transform based compression technique (H.263+). See Tillman: column 5, lines 14-17.

With regards to claims 6, and 15, the modified system discloses that at least one of the plurality of video quality portions having a quality higher than the low quality version is downloaded to the subscriber in real time (Gemmell: [0042], [0040], [0005], second layer is streamed upon user directed second playback request).

With regards to claims 7, and 16, the modified system further comprises, wherein each video quality portions represents a different level of service quality (Gemmell: [0018]. [0053]-[0057]).

With regards to claims 8, 17, 23 and 24, the modified system further comprises the step of determining a download bandwidth available to subscriber terminal (Gemmell: [0035]) and selecting at least one of the plurality of video quality portions having a quality higher than the low quality portion based on the download bandwidth (Gemmell: [0035]).

With regards to claims 9, and 22, the modified system discloses a hierarchical

layer wherein each enhancement layer enhances the lower layers but do not repeat

the data from the lower layers (Gemmell: [0006]). This reads on the claimed

pyramidal scheme.

With regards to claim 10, the modified system further discloses the method of

recomposing a plurality of downloaded video quality portions representing at the

subscriber terminal for presenting the content to a user (Gemmell: [0012],[0040]).

With regards to claim 11, Gemmell discloses a video repository (server) for

storing a plurality of higher quality parts of decomposed videos (enhancement

layers, [0006], [0015]):

a Subscriber unit (client) for storing one or more lower quality parts [0042] of

the decomposed video corresponding to the higher quality parts stored in the

repository, the one or more low quality parts comprising a complete copy of the

video [0044], the subscriber unit including a user interface (input devices, [0032]) for

permitting a user to select a video corresponding to the locally stored lower quality

parts after storing the one or more low quality parts comprising the complete copy of

the video ([0037], [0041]) wherein the selection of the video generates a subscriber

request ([0036], [0042]), and

a network [0033] operatively coupled to the repository and the subscriber unit

for transferring the subscriber request and the higher quality parts of the videos;

wherein in response to the subscriber request, the video repository

downloads at least one of the higher quality parts corresponding to the subscriber

[0042] to be combined with one of the lower quality parts stored by the subscriber

unit [0040].

Gemmell discloses the client computer is coupled over a network (such as

LAN, WAN, etc.) to the server [0033], [0034]. Gemmell additionally discloses that

the transmission of layers separately is particularly advantageous in bandwidth

limitations based on network capacity/types [0004]. Gemmell is however silent on

downloading the plurality of quality portions via a digital subscriber line. Gemmel

further discloses a method of "pre-fetching" certain layers so that it can be available

"on-hand" in the client's memory for quick presentation (Gemmell: [0048], [0051]).

Gemmell only discloses pre-fetching within the context of second and subsequent

layers and silent on pre-fetching the first portion of the video during off peak hours.

Gemmell is further silent on the step of storing videos based on a

predetermined compression algorithm.

In an analogous art, Tillman is evidence that digital subscriber lines were well

known in the art of time for network connection and further evidence for downloading

plurality of quality portions over a bandwidth constrained network such as the digital

subscriber line (see column 3 lines 58-64). Tillman additionally discloses the step of

compressing and encoding video based on predetermined compression algorithm

(see column 5 lines 14-18)

In a further related art, Payton discloses a method of predicting items a

subscriber might like based on user preferences and downloading such items to the

subscriber terminal during off peak hours (see abstract).

It would have been obvious to one of ordinary skill in the art to advantageously incorporate the teachings of Payton by predicting what a user likes, and downloading the low quality portion of the predicted items to the user's terminal during off peak times so that the predicted items can be available "on hand" for immediate playback, wherein the user can examine the video and determine if a higher quality for the video is desired. Additionally, one skilled in the art could have easily combined the methods of storing video according to predetermined compression algorithm for reduced storage space and transmission bandwidth and transmitting the various quality portions via a digital subscriber line connection with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

With regards to claim 12, the modified system further comprises asymmetrical bandwidth for the communication path. See Tillman: column 4, lines 7-8.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from

the mailing date of the advisory action. In no event, however, will the statutory

period for reply expire later than SIX MONTHS from the mailing date of this final

action.

5. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to USHA RAMAN whose telephone number is

(571)272-7380. The examiner can normally be reached on Tue-Fri: 8am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The

fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR

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Should you have questions on access to the Private PAIR system, contact the

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assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-

272-1000.

/Christopher Kelley/
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